BRAIN RESEARCH

VOL. 693 NOS. 1,2 **CONTENTS** **25 SEPTEMBER 1995**

Cited in Biological Abstracts (BIOSIS) – Chem. Abstracts – Index Medicus (MEDLINE) – Current Contents (Life Sci.) – Excerpta Medica (EMBASE) – Psychological Abstracts (PsycINFO) – Pascal et Francis (INIST-CNRS) – RIS (Reference Update) – Current Awareness in Biological Science (CABS)

Guidelines for the submission of manuscripts v

Research reports

Inhibitor of protein synthesis phase-shifts the circadian oscillator and inhibits the light induced-phase shift of the melatonin rhythm in pigeon pineal cells
N. Murakami, R. Nishi, T. Katayama and T. Nasu (Japan) 1

Cation and anion unitary ion channel currents in cultured bovine microglia
J.G. McLarnon, D. Sawyer and S.U. Kim (Canada) 8

Sexual activity increases dopamine transmission in the nucleus accumbens and striatum of female rats
J.G. Pfaus, G. Damsma, D. Wenkstern and H.C. Fibiger (Canada) 21

Immunocytochemical localization of the heparin-binding growth-associated molecule (HB-GAM) in the developing and adult rat cerebellar cortex
K. Wewetzer, H. Rauvala and K. Unsicker (Germany, Finland) 31

Properties of otolith-related vestibular nuclear neurons in response to bidirectional off-vertical axis rotation of the rat
C.H. Lai and Y.S. Chan (Hong Kong) 39

Nucleus tractus solitarius efferent terminals synapse on neurons in the caudal ventrolateral medulla that project to the rostral ventrolateral medulla
S.A. Aicher, O.S. Kurucz, D.J. Reis and T.A. Milner (USA) 51

Tolerance to ketamine-induced blockade of cortical spreading depression transfers to MK-801 but not to AP5 in rats
A. Rashidy-Pour, Z. Motaghed-Larijani and J. Bures (Iran, Czech Republic) 64

Selective destruction of midbrain raphe nuclei by 5,7-DHT: is brain 5-HT involved in alcohol drinking in Sprague–Dawley rats?
A. Adell and R.D. Myers (USA) 70

Cardiovascular neurons in cat caudal ventrolateral medulla: location and characterization of GABAergic input
P.J. Gatti, P.J. Homby, A.K. Mandal, W.P. Norman, A.M.T. DaSilva and R.A. Gillis (USA) 80

Chronic antioxidant treatment improves the cognitive performance of aged rats
D.J. Socci, B.M. Crandall and G.W. Arendash (USA) 88

Fine localization of low and high calcium dependent ATPase activities in the rat sciatic nerve
Y. Mizutani, K.-I. Hirai, G.-Y. Wang, N. Toda and Y. Yamazaki (Japan, China) 95

Phospholipase A_2-induced neurotoxicity in vitro and in vivo in rats
L.E. Clapp, K.L. Klette, M.A. DeCoster, E. Bernton, J.M. Petras, J.R. Dave, M.S. Laskosky, R.C. Smallridge and F.C. Tortella (USA) 101

Expression of estrogen receptor in the facial nucleus is suppressed by estradiol, but not by testosterone, indicating a lack of requirement for aromatization
C. Orikasa, M. Yokosuka and S. Hayashi (Japan) 112

1,2,5-Thiadiazole derivatives of arecoline stimulate M_1 receptors coupled to phosphoinositide turnover
S. Periyasamy, W.S. Messer, Jr., S. Roknich, P. Sauerberg and W. Hoss (USA, Denmark) 118

Post-transcriptional regulation of gene expression in hippocampal neurons by glutamate receptor activation
E.R. Jakoi, D.M. Panchision, C.M. Gerwin and R.J. DeLorenzo (USA) 124

Synaptic interactions of substance P immunoreactive nerve terminals in the baro- and chemoreceptor reflexes of the cat
P.J. Gatti, M. Shirahata, T.A. Johnson and V.J. Massari (USA) 133

Moderate elevation of extracellular potassium transiently inhibits regeneration of sensory axons in cultured adult sciatic nerves
A. Edström, P. Ekström and P. Wiklund (Sweden) 148

Cerebral cell volume regulation during hypernatremia in developing rats
H. Trachtman, P.H. Yancey and S.R. Gullans (USA) 155

Pretreatment with antisense oligodeoxynucleotides directed against the NMDA-R1 receptor enhances survival and behavioral recovery following traumatic brain injury in rats
F.-Y. Sun and A.I. Faden (USA) 163

Male Fischer 344 and Lewis rats display differences in locomotor reactivity, but not in anxiety-related behaviours: relationship with the hippocampal serotonergic system
F. Chaouloff, A. Kulikov, A. Sarrieau, N. Castanon and P. Mormède (France, Russian Federation) 169

Light transmittance as an index of cell volume in hippocampal slices: optical differences of interfaced and submerged positions
N.R. Kreisman, J.C. LaManna, S.-C. Liao, E.R. Yeh and J.R. Alcala (USA) 179

Relationship between analgesia and extracellular morphine in brain and spinal cord in awake rats
F.F. Matos, H. Rollema, Y.O. Taiwo, J.D. Levine and A.I. Basbaum (USA, The Netherlands) 187

(contents continued on p. 269)

0006-8993(19950925)693:1/2;1-4

(contents continued)

Expression of c-*fos* and c-*jun* in rat retina following protracted illumination
G. Mallo, J. Goldstein, J.J. López-Costa and J. Pecci Saavedra (Argentina) 196
A stereological study of substantia nigra in young and old rhesus monkeys
H. Pakkenberg, B.B. Andersen, R.S. Burns and B. Pakkenberg (Denmark, USA) 201
Limbic seizures originating in the olfactory bulb: an electro-behavioral and glucose metabolism study
T. Araki, M. Kato and T. Kobayashi (Japan) 207
α_2-Adrenoceptor agonist, dexmedetomidine, protects against kainic acid-induced convulsions and neuronal damage
T. Halonen, T. Kotti, J. Tuunanen, A. Toppinen, R. Miettinen and P.J. Riekkinen (Finland) 217
Characterization of progesterone-3-[^{125}I-BSA] binding sites in the medial preoptic area and anterior hypothalamus
J.D. Caldwell, C.H. Walker, B.M. Faggin, R.B. Carr, C.A. Pedersen and G.A. Mason (USA) 225
Ketamine antagonizes hypoxia-induced dopamine release in rat striatum
Y. Wang, A.L. Chiou, S.T. Yang and J.C. Lin (Taiwan) 233

Short communications

Non-NMDA glutamatergic excitatory transmission in the descending limb of the spinobulbospinal micturition reflex pathway of the rat
G. Matsumoto, T. Hisamitsu and W.C. De Groat (USA, Japan) 246
Effects of a vigilance-enhancing drug, modafinil, on rat brain metabolism: a 2D COSY ^{1}H-NMR study
C. Piérard, P. Satabin, D. Lagarde, B. Barrère, C.Y. Guezennec, J.P. Menu and M. Pérès (France) 251
Blocking actions of BIDN, a bicyclic dinitrile convulsant compound, on wild-type and dieldrin-resistant GABA receptor homo-oligomers of *Drosophila melanogaster* expressed in *Xenopus* oocytes
A.M. Hosie, Y. Shirai, S.D. Buckingham, J.J. Rauh, R.T. Roush, H.A. Baylis and D.B. Sattelle (UK, USA) 257
Increased light intensity prevents the age related loss of vasopressin-expressing neurons in the rat suprachiasmatic nucleus
P.J. Lucassen, M.A. Hofman and D.F. Swaab (The Netherlands) 261

Author Index 267